

MODIFIED WATER DELIVERIES TO ENP - ROUND TWO MODELING

General Specifications for Alternatives 4, 5 and 6

	MODIFIED WATER DELIVERIES TO EVERGLADES NATIONAL PARK ROUND TWO MODELING		
	Alternative 4	Alternative 5	Alternative 6
L67 A/C	3 Weirs in L67A Levee L67A Canal in and L67C Canal filled	L67A Degrade (Tweak - 18 miles) Fill L67A and L67C Canals Miami Canal Structure	S345 plus 2 Weirs
Seepage Control	S331 to C111	S356 and Collector	S331 to C111
L29	2 weirs west and 1 weir east of S355A/B	L29 Partial Removal (Leave L29 by 355A/B and Tigertail Camp)	2 weirs west and 1 weir east of S355A/B
WCA 3B Seepage Control	S335 to S331	S335 to S331	New Pump Station S335A Pump back into WCA 3B
Operations	LEC Alt 5, Phase 1 Reflect 60/40 requirement in biological opinion	LEC Alt 5, Phase 1 Reflect 60/40 requirement in biological opinion	LEC Alt 5, Phase 1 Reflect 60/40 requirement in biological opinion. Operate L31N similar to Restudy (lower canal stages 0.25 feet below 95 base) and operate C111 project south of S176 similar to 95 base.

MODIFIED WATER DELIVERIES TO ENP - ROUND TWO MODELING

Specifications for Alternatives 4, 5 and 6 as modeled using SFWMM v3.7

Are or Structure		Base 83	LEC95	Alt 4	Alt 5	Alt 6
Lake Okeechobee ops		WSE	Run 25	WSE	WSE	WSE
WCA-1		¹ current regulation schedule				
WCA-2A		² current regulation schedule				
WCA-2B		³ current regulation schedule				
BMP makeup water rule		Yes	Yes	No, but rain driven deliveries to WCA-3A with similar annual average volumes to BMP makeup water rule		
WCA-3A&3B		Zone A/Zone E schedule (9.5 / 10.5 ft)	Current regulation schedule	Rain driven operations		
S12's		Minimum delivery schedule	restricted rain driven water deliveries 10/20/30/40%	Rain driven stage targets (NSM with offsets if needed)		
S333		Water Supply only	⁴ restricted rain driven water deliveries	Rain driven stage targets (NSM with offsets if needed)		
S335	open	7.3	7.5	7.5	7.5	7.5
	close	7.0	7.2	7.2	7.2	7.2
S335A		non-existent				^{See 5} 7.25
						7.00
G211	open	non-existent	6.0	6.0	6.2	6.0
	close		5.5	5.5	5.7	5.5
S338	open	5.2 in L31 @ S331	5.8 in L31n at G211	6.2 @ G211	6.2 @ G211	6.2 @ G211
	close	4.8 in L31N @S331	5.5 in L31N @G211	5.8 @G211	5.8 @G211	5.8 @G211
S331	open	water supply only	⁶ 4.8	4.8	4.8	4.8
	close		4.3	4.3	4.3	4.3
S332 A,B,D	open	non-existent	non-existent	5.0	5.0	4.75
	close			4.75	4.75	4.5

¹ Same as used in LEC Alt5 phase I

² In LEC Alt5 phase I WCA2A used rain driven operations

³ LEC alt5 phase I used rain driven inflows to 2B

⁴ L29 canal constrains S333 tailwater to 7.5 ft, and G3273 stage constraints apply.

⁵ S335A - suggest max capacity = 600cfs. Pump into WCA-3B only if depth of water in WCA-3B at gage 3B-29 is less than 2.0 or 2.5 ft

⁶ Operated to stage criteria at Angel's well

MODIFIED WATER DELIVERIES TO ENP - ROUND TWO MODELING

Are or Structure		Base 83	LEC95	Alt 4	Alt 5	Alt 6
⁷ S332	open	4.7	4.7	removed		
	close	4.3	4.3			
S174	open	5.7	4.85	not-applicable		
	close	5.3	4.65			
S176	open	5.7	5.0	5.3	5.3	5.0
	close	5.3	4.75	5.0	5.0	4.75
S177	open	5.2	4.2	4.2	4.2	4.2
	close	4.3	3.6	3.6	3.6	3.6
S18C	open	2.4	2.6	2.7	2.7	2.7
	close	1.6	2.3	2.3	2.3	2.3
S332E	open	non-existent	non-existent	2.4	2.4	2.4
	close			1.6	1.6	1.6
⁸ S197	open					
	close	1.9	2.3	2.3	2.3	2.3

Common to 83 Base and Alternatives:

S336, S194, S196 are used for water supply only

Common to all alternatives:

S343 A,B would be closed during Jan-June (Sparrow).

⁷ S332: 83 Base: Operated according to minimum delivery schedule for Taylor Slough. Max 165 cfs.

95 Base: Use rainfall stage formula as long as it does not violate flood control criteria defined for S332 above. pump up to 165 cfs between Jan and June to maintain L31W stage between 3.0 and 4.7 ft. Pump up to 500 cfs between July and Dec to maintain L31W stage between 3.0 ft and 4.7 ft.

⁸ S197: 83 Base criteria: S177/S18C open full and S177>4.3, open 3 gates and pull earth plug. In SFWMM flow is limited to keep stage above the gate closed levels specified above.

95 Base criteria: Uses same as Test 7 phase I criteria, namely: Open 3 gates if S177 open and S177 . 4.1 ft or S18C > 2.8 ft. Open 7 gates if S177 > 4.2 ft or S18C > 3.1ft. Open 13 gates if S177 > 4.3 ft of S18C > 3.3 ft. Close when all following conditions are met: 1) S-176<5.2 and S-177<4.2, 2) Storm moved away from basin, and 3) after 1 and 2 are met, keep the number of S-197 culverts open necessary only to match residual flow through S-176. All culverts closed if S-177<4.1 after all conditions satisfied. . In SFWMM flow is limited to keep stage above the gate closed levels specified above.